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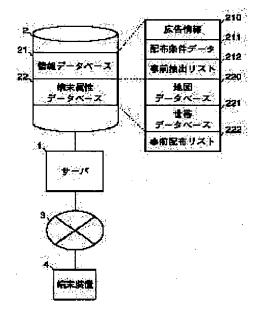
ISHIZUKA YOICHI

## (54) INFORMATION SERVER

#### (57)Abstract:

PROBLEM TO BE SOLVED: To conduct information transmission where detailed selection of a target and real time performance or the like are realized at a small cost.

SOLUTION: A database 2 of a server 1 has an information database 21 and a terminal attribute database 22. The information database 21 has an advertising information main body 210 and a distribution condition data 211 to select a distribution destination for this advertising information. The terminal attribute database 22 consists of a map database 220 to index a distribution area and a household database 221 storing the attribute of each terminal equipment. With an access from a terminal equipment 4, the attribute information of the terminal equipment 4 is read from the terminal attribute database 22 and advertising information whose distribution condition is in matching with the terminal attribution is selected and the selected advertising information is edited within one page and the result is sent to the terminal equipment 4.



#### **LEGAL STATUS**

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CLAIMS

#### [Claim(s)]

[Claim 1] The information database which communicated with two or more terminal units, and the distribution condition data which are the information server which transmits advertising information to each terminal unit, and are the conditions which choose the distribution place of advertising information and this advertising information were made to correspond, and were memorized, A selection means to choose the advertising information which compares the attribute of said terminal unit with the distribution condition data of each advertising information, and suits said conditions as transmit information to this terminal unit, The information server characterized by having an information transmitting means to read and edit the advertising information chosen as transmit information to this terminal unit at the time of communication with said terminal unit, and to transmit to said terminal unit.

[Claim 2] It is the information server according to claim 1 which is a means [ said distribution condition data / have the terminal attribute database which memorized the attribute information containing the identification information of two or more of said terminal units, and said selection means reads attribute information from this terminal attribute database, and ]. [Claim 3] Said selection means is an information server according to claim 1 or 2 performed in advance before communication with a terminal unit.

[Claim 4] Said selection means is an information server according to claim 1 or 2 performed about the terminal unit under this communication at the time of communication with a terminal unit.

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## **DETAILED DESCRIPTION**

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the information server which distributes the information on advertisement leaflets etc. using networks, such as the Internet.

[0002]

[Description of the Prior Art] By the advertisement for which local information, such as a bargain sale of a retail store, used electric-wave media, such as television radio, since the transfer range became wide range too much and costs also became high, paper media, such as a newspaper insertion throwaway, were used chiefly.
[0003]

[Problem(s) to be Solved by the Invention] However, the newspaper subscription layer was aging and there was a fault that whenever [ to the younger age group / exposure ] was not high, in an insertion throwaway. Moreover, the distribution unit was a delivery place unit for every main paper, and since it was only a morning paper, inserting in a throwaway had the trouble which cannot perform assignment of a fine target.

[0004] Moreover, since the throwaway which is a paper medium was the distribution approach for which it depended on the help to plan -> printing -> insertion, it required time amount by distribution and had the fault that reduction of cost could not be desired

[0005] This invention aims at offering the information server which realized selection, real time nature, etc. of the fine target of signal transduction at few costs by using a network.
[0006]

[Means for Solving the Problem] It is the information server which invention of claim 1 of this application communicates with two or more terminal units, and transmits advertising information to each terminal unit. The information database which the distribution condition data which are the conditions which choose the distribution place of advertising information and this advertising information were made to correspond, and were memorized, A selection means to choose the advertising

advertising information were made to correspond, and were memorized, A selection means to choose the advertising information which compares the attribute of said terminal unit with the distribution condition data of each advertising information, and suits said conditions as transmit information to this terminal unit, The advertising information chosen as transmit information to this terminal unit at the time of communication with said terminal unit is read and edited, and it is characterized by having an information transmitting means to transmit to said terminal unit.

[0007] Invention of claim 2 of this application is equipped with the terminal attribute database which memorized the attribute information containing the identification information of two or more of said terminal units, said selection means reads attribute information from this terminal attribute database, and it is characterized by being a means in comparison with said distribution condition data.

[0008] Invention of claim 3 of this application is characterized by performing said selection means in advance before communication with a terminal unit.

[0009] Invention of claim 4 of this application is characterized by performing said selection means about the terminal unit

under this communication at the time of communication with a terminal unit.

[0010] The information server of this invention has memorized two or more advertising information, and transmits this to the terminal unit chosen as a distribution place (target). A distribution place is chosen based on the attribute information on distribution condition data and each terminal unit given to each advertising information. That is, when the attribute information showing what kind of man uses to what kind of man (terminal unit) advertising information is distributed by installing the distribution condition data to specify and a terminal unit in what kind of location is compared and both conditions suit, this terminal unit is chosen as a distribution place of this advertising information. If this selection is performed about combination to two or more advertising information and two or more terminal units of all, it can distribute only at the place which suited on condition that each advertising information. A terminal unit may move only not only in what is installed fixed. If attribute information is memorized to the information server in advance, when transmitting advertising information to a terminal unit, it is not necessary to acquire attribute information from a terminal unit, and processing can become easy, and selection processing can also be carried out in advance before communication with a terminal unit. In addition, although advertising information can be transmitted also to the terminal unit which moves, the attribute information on a migration terminal unit should just be sent from the antenna office and the terminal unit itself of mobile communications. Moreover, you may make it the communication with a terminal unit transmit information from a server to a terminal unit not only using the method held when there is access from a terminal unit to this server but using the so-called push system periodically.

[0011] In addition, as long as the advertising information on this invention is the information about which it is not limited to a business advertisement and an individual and two or more persons should be told, what kind of thing is sufficient as it. For example, use specifications, such as a telephone and power, public relations and the weather report of administration, stock quotations, etc. are sufficient.

[0012]

[Embodiment of the Invention] <u>Drawing 1</u> is drawing showing the outline configuration of the advertising information distribution system containing the information server which is the operation gestalt of this invention. This system has constituted the general gestalt that a server 1 is connected with a terminal unit 4 through a network 3. This network consists of the Internet and BBS. The server 1 has the database 2. The database 2 consists of a terminal attribute database 22 with which the attribute information for choosing the distribution place of the information database 21 and advertising information which memorizes advertising information etc. is memorized. An information database 21 consists of prior extract list 212 which extracts in advance the terminal unit which distributes this advertising information, and memorizes it, before accessed from the advertising information-storage area 210 where the information body (advertising information) distributed to a terminal unit is memorized, the distribution condition data storage area 211 which memorizes the distribution conditions of this advertising information, and a terminal unit, and these storage areas are set up according to an individual about each advertising information. Moreover, each advertising information is identified with an advertising identification number. [0013] Moreover, the terminal attribute database 22 consists of a prior distribution list which lists in advance the advertising identification number of the map database 220 which pinpoints the location of each building (household) with a coordinate, the household database 221 which memorized the information about each household, and the advertising information which should be distributed to each household. In addition, a household here is a concept including a dwelling unit, and an office and a store. Moreover, the household database contains the household identification number which identifies each household. [0014] When there is access from a terminal unit 4, a server 1 carries out extract edit only of the advertising information which distribution conditions suit among the advertising information memorized by the information database 21 based on the attribute information on the terminal unit 4, and answers this terminal unit 4. A communication link is performed by the http protocol and a terminal unit 4 expresses this as WWW browser software. Said two or more advertising information is edited into 1 page, and is transmitted in the form of [ of having stretched the link jumped for every advertisement within the same page ] a markup text. In addition, an index may be formed in the head of a page, and it edits into two or more pages, and you may make it access a server for every advertising information. The terminal unit 4 consisted of personal computers, and is equipped with the function which accesses a server 1 through a network 3, for example, communication facility, the function (browser software) which displays the information by the predetermined protocol (http) which data-transmission-andreception-functioned and was received. In addition, a transmitting protocol is not limited to http.

[0015] <u>Drawing 2</u> is drawing showing the configuration of the terminal attribute database memorized by the database 2. This drawing (A) is drawing showing the map database 220. The axis of coordinates is set up on the map and all of the location of buildings, such as a dwelling unit and a store, are specified with this coordinate. A coordinate may use lat/long and may apply original system of coordinates other than this. Each building (the case of an apartment each dwelling unit in a building) is identified with the household identification number according to individual, and household information is memorized as shown in this drawing (B) for every dwelling and store.

[0016] Here, as household information, it is an identification number.

Address (zip code)

Telephone number

There is existence of the name of all class amount-of-savings family structure families of a dwelling, sex, a birth date, an occupation, and a hobby pet etc., and, in the case of a place of business or a school, a building is a management form (an individual, corporations (a corporation for profit, educational foundation, etc.)).

The number of workers, the contents of the number enterprise of students, etc. are replaced with family information, and it adds to household information.

[0017] Moreover, various information, such as a hobby of a family structure member or a company employee and the E-mail address, can be made into household information besides the above-mentioned information, and the contents are not limited above.

[0018] <u>Drawing 3</u> is drawing showing an example of the advertising information offered by the advertiser. Advertising information consists of an advertising information body of this drawing (A), and distribution condition data of this drawing (B). Conventionally, an information body has the contents currently transmitted by the newspaper insertion throwaway etc., and

summarizes this with the layout in which a display and perusal are possible by the browser. On the other hand, distribution condition data consist of data which specify the condition data and the distribution time zone which specify the attribute of terminal units, such as a distribution period, area to distribute, and family structure, as shown in this drawing (B). [0019] Moreover, a prior extract list is a list which extracts the terminal unit which searches said terminal attribute database and corresponds based on distribution condition data, and memorizes the identification number of this terminal unit, before being accessed from a terminal unit 4, when advertising information is registered into an information database. When memorizing the identification number on the prior extract list and there is access from a terminal unit, it can check whether this advertising information is distributed to that terminal unit only by referring to this list, the time and effort which judges on real time whether the attribute of that terminal unit suits distribution conditions can be saved, and advertising information can be edited promptly. It not only performs this prior extract at the time of registration of advertising information, but after registration, when required, what is necessary is made to carry out.

[0020] Drawing 4 is a flow chart which shows actuation of said server 1. This drawing (A) is a flow chart which shows information registration actuation. This actuation shows the actuation in the case of extracting a distribution place in advance. This will be registered into an advertising information database if advertising information is inputted from an advertiser (s1) (s2). An official in charge may perform the input of this advertising information, and an advertiser is good in a direct line through a network. After this, the distribution condition data of the registered this advertising information are read (s3), the information on each terminal unit registered into the terminal attribute database on this distribution condition is retrieved, and the terminal unit which suits conditions is extracted as a distribution place (s4). The identification number of the extracted terminal unit is memorized on the extract list corresponding to the above-mentioned advertising information (s5).

[0021] This drawing (B) is a flow chart which shows the actuation when being accessed from a terminal unit 4. If there is access from a terminal unit 4, the identification number of this terminal unit 4 will be deduced first (s10). When a terminal unit 4 begins and accesses this server, information, such as the self telephone number and the address, is transmitted to this server. By searching the household database 221 with information, such as this telephone number, a server 1 specifies this terminal unit 4, and deduces an identification number. A server 1 transmits identification code (Cookie information) to a terminal unit 4 at the time of this access to begin. The Cookie information on a terminal unit 4 smell lever is written in the setting information file of a WWW browser. At the time of access after the next time of this terminal unit 4, since a WWW browser transmits this Cookie information to a server 1 automatically, by receiving Cookie information, a server 1 can identify a terminal unit and can deduce identification information. In addition, an approach to deduce identification information is not limited to this.

[0022] The terminal attribute database 22 is searched with the deduced identification number, and the attribute information corresponding to this terminal unit 4 is read (s11). The advertising information which should be transmitted to this terminal unit using this identification number and attribute information is chosen (s12). About the advertising information to which this selection is carried out by searching the prior extract list 212 with an identification number about the advertising information to which the prior extract is carried out, and the prior extract is not carried out, it performs by judging whether attribute information conforms to distribution conditions. The above-mentioned selection actuation is performed about all the advertising information registered into the information database 21, the selected advertising information is read (s13), this is edited into a 1-page markup text (image data is included) (s14), and said terminal unit 4 is answered (s15). [0023] The distribution area of advertising information is explained with reference to drawing 5. Suppose that the distribution area of the advertising information 1-5 is specified like illustration. The advertising information 1 and the advertising information 3 make the inside of the circle of a fixed distance distribution area from specific points (location of a store etc.). The advertising information 2 has circle-like distribution area, this, and the distant polygonal distribution area. Moreover, the advertising information 4 and 5 has the distribution area of the configuration of arbitration. In the case of this drawing, when the terminal unit of A point accesses a server 1, the advertising information 1 and the advertising information 2 will be received. When the terminal unit of B point accesses a server 1, the advertising information 1, 3, 4, and 5 will be received. Moreover, when the terminal unit of C point accesses a server 1, only the advertising information 5 will be received. In addition, at the distribution conditions shown in drawing 3, it is 1. Method 2 which extracts the dwelling unit contained in the circle of the predetermined radius centering on specific coordinates other than an advertiser's store or a store as a distribution place The area which can be pinpointed by the name like the above-mentioned \*\*\*\* housing complex is set up on the map. The method which specifies distribution area by the area name (in addition to \*\*\*\* housing complex, assignment methods, such as the circumference of OO station and the area along the Kokudou \*\*\*\* \*\*\*\*, can be considered.) Although he is trying to extract the terminal unit of a distribution place using the assignment method of a distribution place In addition to this, it is 3. Method 4 which determines the distribution number of houses previously, extracts the dwelling unit for the distribution number of houses focusing on an advertiser's store or specific coordinates other than this, and is made into a distribution place Method which draws and specifies the distribution range on a map by the manual. That is, a map is displayed on a computer display and the distribution range is freehand surrounded using a pen or a mouse on this map. The dwelling included in the range of this surrounded graphic form is extracted, and it considers as a distribution place. [0024] Moreover, although selection conditions other than the distribution area except assignment of a distribution time zone or a male single-person household etc. are specified with the above-mentioned operation gestalt, assignment of selection conditions other than this is also possible.

[0025] Moreover, although information to distribute is made into the advertising information on a store with the above-mentioned operation gestalt, as information to distribute, it is applicable also to transfer of public information, such as a circular notice of a town association, and city public relations. Furthermore, it can also use for distribution of individually-addressed information, such as use details, such as direct mail, and a telephone, power, besides the information distributed to two or more persons can be received from individuals other than a store or a public institution, and it can also use for dispatch of individual humanity news.

[0026] Furthermore, although the terminal unit installed fixed in the dwelling was used as the terminal unit of a distribution place with the above-mentioned operation gestalt, the terminal unit which moves can also be made applicable to distribution.

As a method for pinpointing the location of a migration terminal unit, in the case of the terminal unit accessed via a PHS telephone, when the PHS antenna office which is communicating with PHS telephone searches either, a location can be pinpointed in with a radii [ 100m-200m ] precision from the antenna office. Moreover, in the case of the migration terminal unit carried in the automobile, a server can determine an exact location by reading exact positioning data from the carnavigation system currently installed in the automobile, and transmitting this to a server. Moreover, what combined portable GPS positioning equipment and a terminal unit besides the carnavigation system may be applied.

[0027] What is necessary is to transpose a household to an antenna station and just to apply the distribution conditions of above-mentioned (1) - (4), when distributing advertising information to a migration terminal unit. That is, what is necessary is just to choose that migration terminal unit as a distribution place, when the migration terminal unit which accessed distribution area every assignment with the range and the number of stations of an antenna station using the above (1) and the method of (4) exists in this range.

[0028] Moreover, you may make it specify a PHS antenna station as distribution conditions in the case of the advertising information which makes a distribution place the migration terminal unit using a PHS telephone. When the accessed migration terminal unit is communicating through this specified PHS antenna station, the above-mentioned advertising information is distributed to that migration terminal unit.

[0029] In addition, since the businessman, the traveler, etc. use the migration terminal unit in many cases, if advertising information, such as a hotel, a tourist home, a campsite, a gas station, a convenience store, a supermarket, and a restaurant, is distributed, obtaining a high effect of advertising is expected.

[0030] Moreover, a user may enable it to specify the location (house of imagination) of arbitration which is different from a self location from a terminal unit. If the house data of this imagination are inputted, a server will transmit the advertising information which makes that location distribution area to this terminal unit. This is effective when a user acquires information, such as a residence of a new address, and work, in advance.

[0031] Moreover, you may enable it to specify the distribution range of advertising information from a terminal unit side. For example, although the usual advertising information is good as the distribution condition of this information, only the selling information on a used car requires a purport to acquire even if it is a long-distance thing of a server from a terminal unit. In addition to the advertising information edited based on the usual conditions, a server retrieves the used car selling information outside the distribution range, adds this to a page and transmits.

[0032] Moreover, you may enable it to specify the contents of the above-mentioned demand as a detail more. For example, if the conditions of a type of a car, a model, a price band, etc. are required of a server from a terminal unit in the case of the above-mentioned used car, what suits this condition out of the advertising information which does not make this terminal unit a distribution place will be searched, and it will add and transmit to the usual advertising information. This method may enable it to specify conditions, such as area, a price, and room arrangement, when requiring the advertising information on an existing house besides a used car.

[0033] Moreover, you may enable it to specify the range and field of reception of advertising information more concretely from a terminal side. For example, it is good even if possible in a setup of authorization/refusal of the reception of the advertising information applicable to original distribution conditions. Moreover, a setup of the receipt range is permitted for every informational field from a terminal unit, and you may make it distribute the information on the set-up range. [0034] In addition, although the above-mentioned operation gestalt is a system which edits and returns the advertising information which makes this terminal unit a distribution place, is using a prior extract list on the basis of the gestalt of drawing 6 (A) as shown in this drawing (B) and has quickened the extract of advertising information when a terminal unit accesses a server The identification number of the advertising information which should be distributed to each terminal unit (household) of every may be listed (refer to this drawing (C)). In this case, the prior distribution list 222 (refer to drawing 1) set up for every terminal unit is used. By doing in this way, edit of advertising information when there is access from a terminal unit can be quickened more. Moreover, when the mail boxes (proxy server etc.) which stock advertising information exist in a terminal unit side and advertising information is registered, you may distribute to the mail box of relevance directly like drawing 6 (D).

[0035] Moreover, access to the server of a terminal unit may be performed by actuation of a user, and a terminal unit may perform it automatically (for example, every [ the time of power-source ON of equipment or fixed time amount (every)]). Moreover, the so-called push system is introduced and you may make it distribute advertising information to a terminal unit (communication software for push systems) automatically from a server 1 (push server).

[0036] Moreover, the contents of advertising information may include the thing of the data format of text data and not only static-image data but a video data, voice data, etc.
[0037]

[Effect of the Invention] According to this invention, local information can be distributed to the range for which were most suitable as mentioned above by determining the distribution place of advertising information based on the attribute of the area of a terminal unit etc.

[Translation done.]

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#### **DESCRIPTION OF DRAWINGS**

[Brief Description of the Drawings]

[Drawing 1] Drawing showing the advertising distribution structure of a system containing the server which is the operation gestalt of this invention

[Drawing 2] Drawing showing the configuration of the map database of this server

[Drawing 3] Drawing showing the configuration of the information database of this server

[Drawing 4] The flow chart which shows actuation of this server

[Drawing 5] Drawing explaining the distribution area of two or more advertising information

[Drawing 6] Drawing explaining the various distribution methods of advertising information

[Description of Notations]

1 - Server,

2 -- Database

21 - Information database

210 -- Advertising information storage area

211 -- Distribution condition data storage area

212 - Prior extract list

22 - Terminal attribute database

220 - Map database

221 - Household database

3 -- Network

4 -- Terminal unit

## [Translation done.]

#### \* NOTICES \*

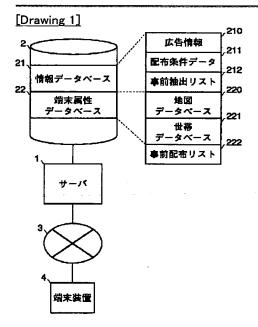
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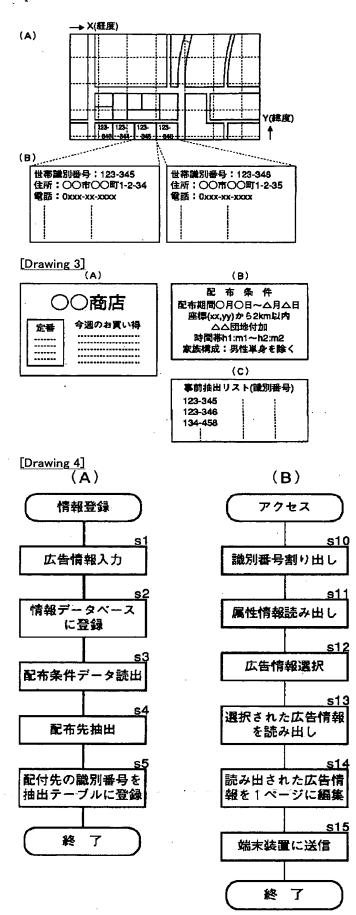
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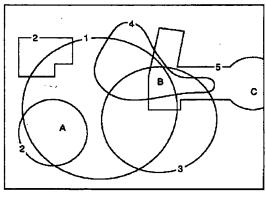
# **DRAWINGS**

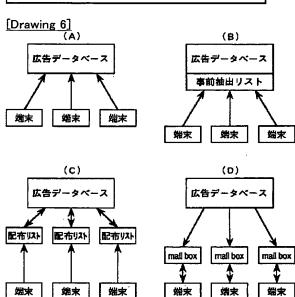


[Drawing 2]



[Drawing 5]





[Translation done.]